

Title (en)
LIQUID TO AIR MEMBRANE ENERGY EXCHANGERS

Title (de)
FLÜSSIGKEIT-ZU-LUFT-MEMBRANENERGIEAUSTAUSCHER

Title (fr)
ÉCHANGEURS D'ÉNERGIE À MEMBRANE LIQUIDE-AIR

Publication
EP 3183051 B1 20200429 (EN)

Application
EP 15834201 A 20150819

Priority
• US 201462039254 P 20140819
• CA 2015050787 W 20150819

Abstract (en)
[origin: US2016054012A1] A liquid to air membrane energy exchanger (LAMEE) can be used as part of a heating and cooling system to transfer heat and moisture between a liquid desiccant and an air stream to condition the temperature and humidity of the air flowing through the LAMEE. The membrane can be a non-porous film having selective permeability for water, but not for other constituents that form the liquid desiccant. The non-porous membrane can allow for use of liquid desiccants, such as glycols, that had been previously determined to be unacceptable or undesirable in these types of applications. In an example, the membrane can be an ion-exchange membrane or pervaporation membrane.

IPC 8 full level
F24F 12/00 (2006.01); **F24F 3/14** (2006.01); **F24F 3/147** (2006.01); **F28D 21/00** (2006.01)

CPC (source: EP US)
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Cited by
EP3980149A4; US11892193B2; US11300364B2; US11598534B2; US10928082B2; US11761645B2; US11668478B2; US11732908B2; US11035618B2; US11732972B2

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DOCDB simple family (publication)
US 10712024 B2 20200714; US 2016054012 A1 20160225; AU 2015306040 A1 20170406; CA 2958480 A1 20160225; CA 2958480 C 20221025; CN 107249715 A 20171013; CN 107249715 B 20201106; DK 3183051 T3 20200602; EP 3183051 A1 20170628; EP 3183051 A4 20180418; EP 3183051 B1 20200429; WO 2016026042 A1 20160225

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US 201514830492 A 20150819; AU 2015306040 A 20150819; CA 2015050787 W 20150819; CA 2958480 A 20150819; CN 201580053421 A 20150819; DK 15834201 T 20150819; EP 15834201 A 20150819